

34629 DRU

Work Order ID 53909

November 23, 2009 2:41:33 PM



Page 1

Item ID: D205-634-041

Accept



Setup Start



Revision ID: D

Stop



Item Name: Replacement Skidtube

Start Date: 23/11/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 02/12/2009 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

BS

Date:

09-11-23

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2580

Rev D

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG002

N/A

110

0.00



BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

1-Bend as per program D2580.C on CNC Bender and Folio FT009

2-Cut tubes as per Dwg. D2580

- Ann 9-12-03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

120

0.00



Skidtubes

Memo

0.00

Skidtubes

1- Deburr ends

2- C'sink holes as per dwg without cutting fluid

3- Prepare tube for welding, remove alodine as required.

4- Scribe batch number insied aft end of tube.

1 - - AUG 9-12-07

130

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

278 08/12/07

(40)

8

W/O:		WORK ORDER CHANGES					
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

140

0.00



Skidtubes

0.00

Skidtubes

Memo

1-Weld step D2576 as per Dwg. D2580 and QSI 004
A/R□□□ Aluminum Rod *m112860*

BE 09/12/08

2-Prep per QSI 005 and weld crossbolt spacers D2579 as per Dwg. D2580, QSI 004.

For D2579 spacers, weld one side, pass 3/8" drill, weld other side, pass 3/8" drill
A/R□□□ Aluminum Rod *m112860*

BE 09/12/08

3-Grind welds as per Dwg D2580 Grind flush ridge made from bending

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64",
adjust stopper not to hit web. Deburr

5-Counterbore crossbolt spacers to 7/16" ID x 1.0" deep as per Dwg D2580.
Deburr holes

6-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Deburr

7-Drill pilot holes for Towring using DT8091, open to .640" and Deburr

AWM 9-12-08

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Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00 0.00	27 8 02/12/08			(X)	✓		
160 QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00	27 8 02/12/08			(X)	✓		
170 HandFinish Hand Finishing	Pressure Wash per QSI005 4.3 Memo	0.00 0.00	27 8 02/12/10			(X)	✓		

W/O:		WORK ORDER CHANGES					
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Required Date:	02/12/2009	Req'd Qty:	1.00	Customer:		
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>M 112148</i> Memo START TIME: <i>9:20</i> OVEN TEMPERATURE: <i>350°</i> FINISH TIME: <i>9:50</i>	0.00 0.00		<i>BL 02-12-10</i>		<i>①</i>			
190 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00		<i>del 02/12/11</i>		<i>①</i>	<i>8</i>		

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Start Date: 23/11/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 02/12/2009 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

200

0.00



HandFinish

Memo

0.00

=> M1 09/12/11 (X1) 0

Hand Finishing

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates
A/R ☐ ☐ ☐ Sikaflex-291 11/12/34
Sikaflex expire date: 10/09

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per QSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with Sikaflex. Clean excess adhesive
A/R ☐ ☐ ☐ Sikaflex-291 11/12/34
Sikaflex expire date: 10/09

5-Wing Walk as per Dwg D2580 and QSI 005 4.4
Batch: 11/12/263

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Setup Start



Stop



Start Date: 23/11/2009 Start Qty: 1.00



Cust Item ID:

Required Date: 02/12/2009 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Stop



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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210

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

27 8/21/14

Quality Control

Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

(4)

f

220

Packaging

0.00



Packaging

Memo

0.00

PPD 51220

Packaging

Identify and pack for shipping as per PPPD205-634-041

Location: _____

PPP Rev: _____

9/12/14 SP

(2)

230

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

12.09.12.16

PP 0912-15

(1)

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Page 1

November 23, 2009 2:41:41 PM

Work Order ID: 53909

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Start Date: 23/11/2009

Required Date: 02/12/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty ch Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D2580-1RevD

Manufactured

No

110

Each

1.0000

1.0000



205 Skidtube bent detail

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

1

53233

1

D2576-3RevG

Manufactured

No

140

Each

160.0000

1.0000



Step (maching detail)

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

160

43504

12

46661

101

52215

47

- 54279 - AWH 9-12-08
~~50464~~

* 1 80 09/12/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

November 23, 2009 2:41:42 PM

Work Order ID: 53909



Parent Item: D205-634-041RevD



Parent Item Name: Replacement Skidtube

Start Date: 23/11/2009

Required Date: 02/12/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2579RevE

Manufactured

No

140

Each

193.0000

20.0000



Crossbolt Spacer

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

LG

71

51525

71

Main Warehouse

ST

122

43988

4

46434

4

46956

2

47797

9

48272

2

51314

71

51315

30

Handwritten: 53780 x 20

Handwritten: 3E 09/12/08

D2855RevA

Manufactured

No

200

Each

92.0000

1.0000



Cap

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

FP6

92

50513

1

50770

3

51539

88

Handwritten: X 1 M 09/12/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Comments:

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---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

AN3-5A Purchased

No

200

Each

2,171.000

2.0000



Bolt

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

2171

100188

188

105057

1983

200

Each

5,592.000

2.0000

AN960JD10L



Washer

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

5592

101291

16

104885

153

105793

236

109632

348

110985

4839

XZ 21 09/12/11

XZ 21 09/12/11

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

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---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

ALS7-1032-130		Purchased	No			200	Each	2,880.000	50.0000			
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Insert

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
ST	2880	
105855	16	
108606	52	
111529	1488	
111779	313	
112772	11	
113238	1000	

x50 M 09/12/11

AN3C4A		Purchased	No			200	Each	2,075.000	50.0000			
--------	--	-----------	----	--	--	-----	------	-----------	---------	--	--	--



BOLT

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
ST	2075	
112314	13	
112720	12	
112724	3	
112829	88	
112991	39	
113121	920	
113226	1000	

M 113359

x50 M 09/12/11

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---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

AN960C10L		Purchased	No			200	Each	2,604.000	50.0000			
-----------	--	-----------	----	--	--	-----	------	-----------	---------	--	--	--



washer

Warehouse	Location	Loc Qty	Loc Code
OFFSHORE			
	FG	100	
	103585	100	
Main Warehouse			
	ST	2504	
	112116	548	
	112612	956	
	12933	1000	

D3566-13RevC

Manufactured No



Gasket

200	Each	106.0000	1.0000
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Warehouse	Location	Loc Qty	Loc Code
Main Warehouse			
	FP	104	
	1606	21	
	53461	83	
Main Warehouse			
	ST	2	
	45717	1	
	50265	1	

x 50 M 09/12/11

x 1 M 09/12/11

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Comments:

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Required Qty: 1.00

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D3566-5RevC		Manufactured	No			200	Each	48.0000	1.0000			
Gasket												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
FP	28	
51929	2	
53804	26	
Main Warehouse		
FP19	16	
52909	16	
Main Warehouse		
ST	4	
36113	1	
46186	1	
47318	1	
51260	1	

X1 11/09/12/11

W/O:		WORK ORDER CHANGES					
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D3566-1RevC		Manufactured	No			200	Each	65.0000	2.0000			
Gasket												

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

FP

36

52512

3

53790

33

Main Warehouse

ST

29

46349

1

51218

1

51259

3

53455

24

Handwritten: 23/11/09 12/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November 23, 2009 2:41:42 PM

Work Order ID: 53909



Parent Item: D205-634-041RevD



Parent Item Name: Replacement Skidtube

Start Date: 23/11/2009

Required Date: 02/12/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3564-11RevD

Manufactured

No

200

Each

33.0000

1.0000



Wearshoe



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

1353808

X111 091211

FP

5

51905

5

Main Warehouse

FP19

26

51594

3

52125

23

Main Warehouse

ST

2

45823

1

50112

1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November 23, 2009 2:41:42 PM

Work Order ID: 53909

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Start Date: 23/11/2009

Required Date: 02/12/2009

Comments:

Start Qty: 1.00

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Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3564-13RevD Manufactured No



Wearshoe

200 Each 46.0000 1.0000

Warehouse Location	Loc Qty	Loc Code
-----------------------	---------	----------

Main Warehouse

FP17 34

51611 32

52059 2

Main Warehouse

ST 12

45409 2

46495 10

XL M 09/12/11

D3564-9RevD Manufactured No



Wearshoe

200 Each 21.0000 1.0000

Warehouse Location	Loc Qty	Loc Code
-----------------------	---------	----------

Main Warehouse

FP19 19

51675 1

52593 18

Main Warehouse

ST 2

44659 1

45825 1

B353806

X1 M 09/12/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November 23, 2009 2:41:42 PM

Work Order ID: 53909



Parent Item: D205-634-041RevD



Parent Item Name: Replacement Skidtube

Start Date: 23/11/2009

Required Date: 02/12/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3564-5RevD		Manufactured	No			200	Each	24.0000	1.0000			
Wearshoe												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
OFFSHORE	B5380 S	x 1 M 09/12/11
FG	2	
34806	2	
Main Warehouse		
FP19	7	
51925	7	
Main Warehouse		
ST	15	
45824	1	
47433	1	
52595	13	

D2594-3RevC

Manufactured No

200

Each

840.0000

16.0000



O-Ring, 205 Skidtube

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
FP	27	
51613	27	
Main Warehouse		
ST	813	
52562	813	x 16 M 09/12/11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November 23, 2009 2:41:42 PM

Work Order ID: 53909



Parent Item: D205-634-041RevD



Parent Item Name: Replacement Skidtube

Start Date: 23/11/2009

Required Date: 02/12/2009

Comments:

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2594-1RevC		Manufactured	No			200	Each	431.0000	16.0000			
Plug, 205 Skidtube												

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

431

42221

16

42807

92

43884

3

46435

2

51527

9

51757

309

X16 24 09/12/4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2580	REV. D SHEET 1 OF 3
DATE 07.02.27		TITLE 205 SKIDTUBE ASSEMBLY	SCALE NTS
A	96.09.16	NEW ISSUE	
B	96.12.02	AS MANUFACTURED	
C	98.08.26	REDRAWN, INCLUDED DEO 9094/9097	
D	07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183	

RELEASED
07-06-28 *[Signature]*

QTY -041	QTY -045	Part Number	Description
X		D2580-041	SKIDTUBE ASSEMBLY
	X	D2580-045	SKIDTUBE ASSEMBLY
1	1	D2500-1-190	EXTRUSION
1	1	D2576-3	STEP
20	24	D2579	CROSS BOLT SPACER
16	16	D2594-1	PLUG
16	16	D2594-3	O-RING
1	1	D2596	205 WEB
1	1	D2855	AFT CAP
1	1	D3564-5	WEARSHOE
1	1	D3564-9	WEARSHOE
1	1	D3564-11	WEARSHOE
1	1	D3564-13	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1	1	D3566-13	GASKET
50	50	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT
50	50	AN3C4A	BOLT
2	2	AN3-5A	BOLT
50	50	AN960C10L	WASHER
2	2	AN960JD10L	WASHER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 53909

B109-11-23

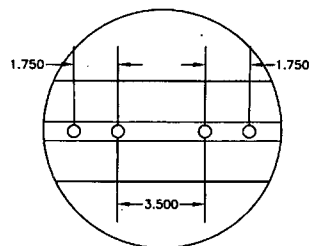
GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL $\varnothing 0.297$ HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:
SEE NOTES ON
PAGE 2 FOR D2580-041 AND
PAGE 3 FOR D2580-045
- 8) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

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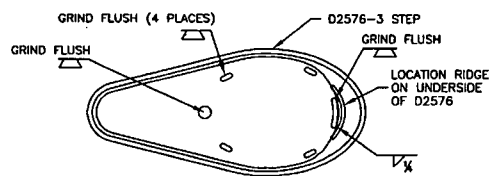
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DETAIL A
SCALE 5:24

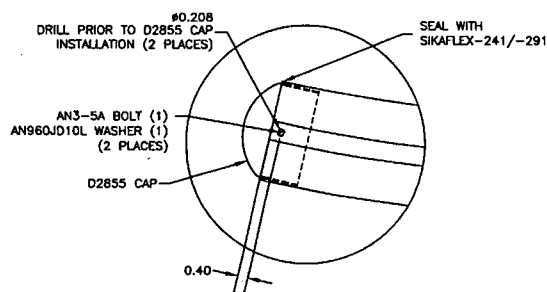


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07-06-28

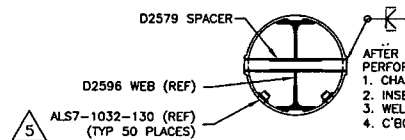
DETAIL B
SCALE 5:24



DETAIL C
SCALE 5:24



SECTION D-D
SCALE 5:24

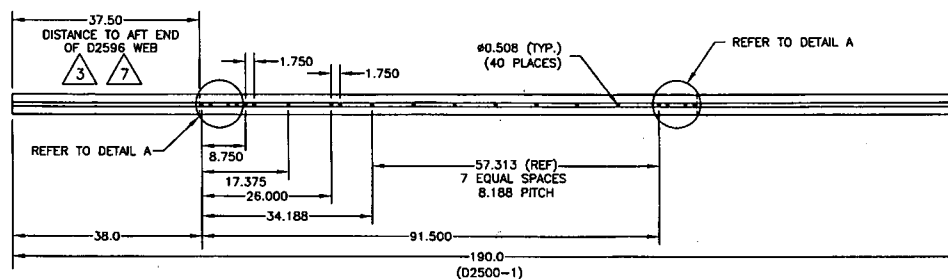


- AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. CHAMFER HOLE 0.050 X 45°
 2. INSERT D2579 SPACER (20 PLACES)
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

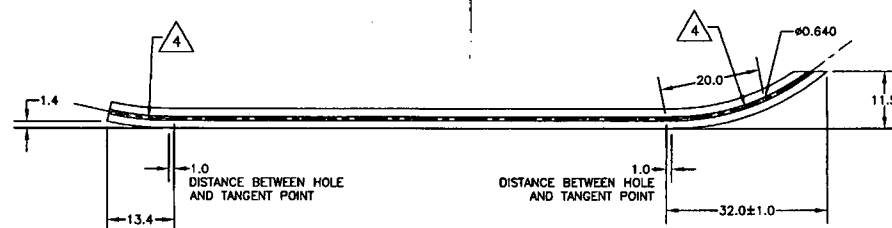
D2580-041 NOTES

- i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB POWDER COAT ASSEMBLY GLOSS WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3 BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

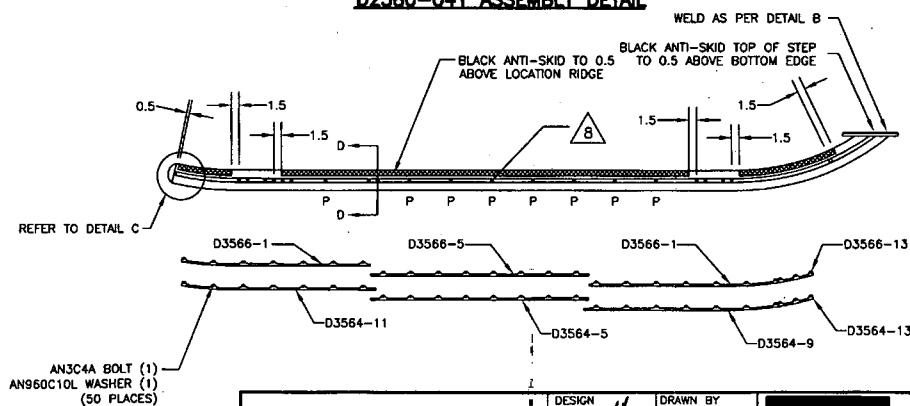
D2580-1 DRILLING DETAIL



D2580-1 BENDING AND CUTTING DETAIL



D2580-041 ASSEMBLY DETAIL



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DESIGN	11
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1

CHECKED 

4

DATE _____

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PH

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DART

DART AEROSPACE LTD.
HAWKESBURY, ONTARIO, CANADA

	DRAWING NO.
--	-------------

D2580

1	TITLE	2	3	4	5	6	7	8	9	10	11	12

205 SKIDTUBE ASSEMBLY

REV. D

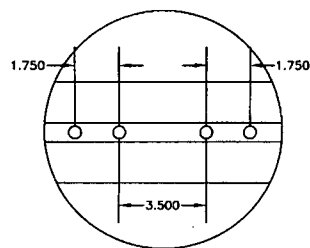
SHEET 2 OF 3

SCALE

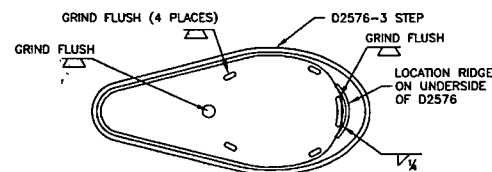
1.24

W/0 53909

DETAIL E
SCALE 5:24

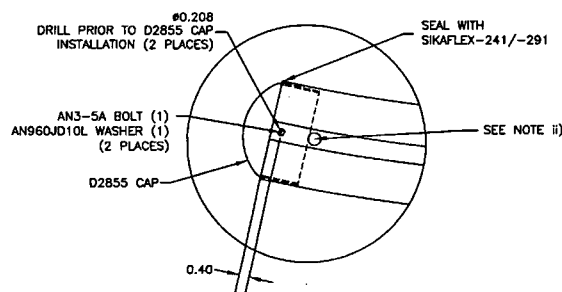


DETAIL F
SCALE 5:24

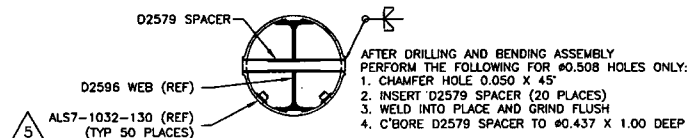


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07-18-94

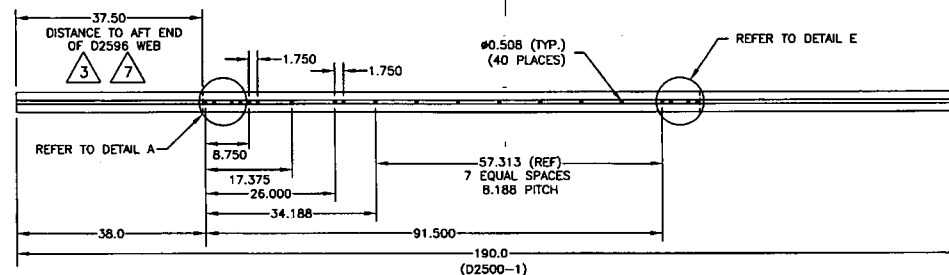
DETAIL G
SCALE 5:24



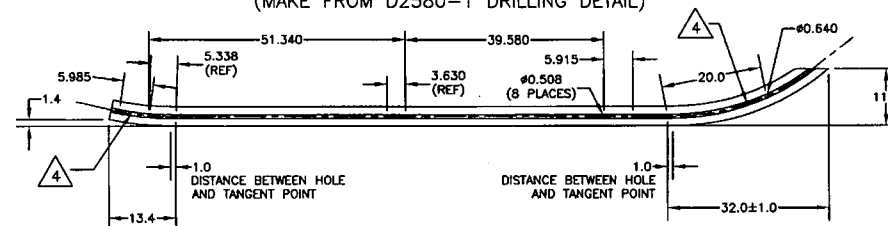
SECTION H-H
SCALE 5:24



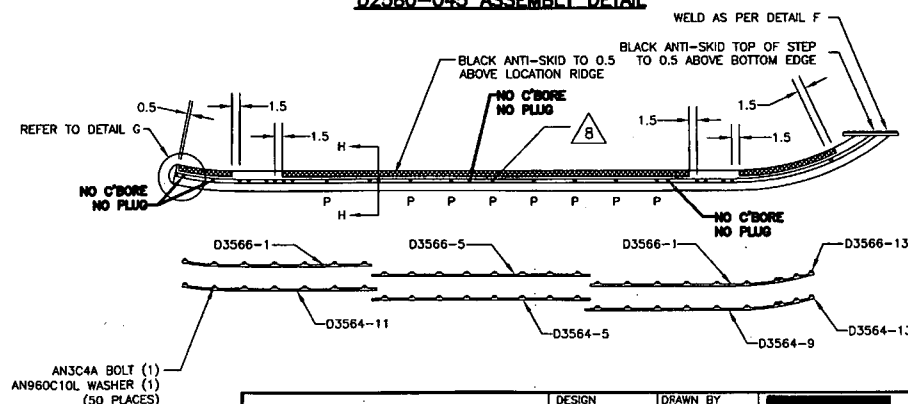
D2580-1 DRILLING DETAIL



D2580-5 BENDING AND CUTTING DETAIL
(MAKE FROM D2580-1 DRILLING DETAIL)



D2580-045 ASSEMBLY DETAIL



D2580-045 NOTES

- i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB POWDER COAT ENTIRE ASSEMBLY GREEN (REF. 4.3.5.8) PER DART QSI 005 4.3 BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4
- ii) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

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DESIGN	DRAWN BY	DART	DART AEROSPACE LTD.
CHECKED <i>RH</i>	APPROVED <i>RH</i>		HARRISBURG, ONTARIO, CANADA
DATE	DRAWING NO.	TITLE	REV. D
07.02.27	D2580	205 SKIDTUBE ASSEMBLY	SHEET 3 OF 3
			SCALE 1:24

NO. 219

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 53918
Part number: D205-634-041
Description: 205 skid
Welding Process: Tig[☒] Mig[]
Base material: Aluminium
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pat Dwyer Date of Test Coupon 09.12.04
Welder Barclay Elliott Date of Test Coupon 09.12.04

The above named individual is qualified in accordance with AWS D17.1.2001 to weld